



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Moungi G. Bawendi et al. Art Unit : 1641  
Serial No. : 09/160,454 Examiner : M. Pham  
Filed : September 24, 1998  
Title : BIOLOGICAL APPLICATIONS OF QUANTUM DOTS

Commissioner for Patents  
Washington, D.C. 20231

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**RESPONSE TO THE OFFICE ACTION DATED FEBRUARY 3, 2000**

In response to the office action dated February 3, 2000 ("Office Action"), please amend the application as set forth below.

**In the Claims:**

In claim 2, line 2, replace "the quantum dot" with --the semiconductor nanocrystal--.

In claim 11, line 3, replace "molecules," with --molecules--.

In claim 28, line 28, replace "substantially monodisperse" with --monodisperse--.

In claim 31, line 2, replace "phosphine oxides," with --phosphine oxides, and--.

Please add new claims 49-61 as follows:

--49. A composition comprising:

a semiconductor nanocrystal having a selected band gap energy;  
an overcoating layer disposed on the semiconductor nanocrystal, the overcoating layer comprised of a material having a band gap energy greater than that of the semiconductor nanocrystal;

an outer layer disposed about the overcoating layer, the outer layer comprising a plurality of ligands, each having at least one linking group for attachment of the ligand to the

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